



14P56  
Jew1mge

BY HAND

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: LeClair *et al.*

Confirmation No.: 6248

Application No.: 10/530,393 (Natl. stage of  
PCT/US03/32167)

Group Art Unit: To be assigned

Filed: October 7, 2003

Examiner: To be assigned

For: HEAT SHOCK PROTEIN BINDING  
FRAGMENTS OF CD91, AND USES  
THEREOF

Attorney Docket No.: 8449-304-999  
CAM No.: 708584-999303

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §1.56 AND §1.97**

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. §1.56 and §1.97 to inform the United States Patent and Trademark Office (“USPTO”) of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of any claim of the application, Attorneys for Applicants hereby invite the Examiner’s attention to references A01-A23, B01-B16 and C01-C124 listed on the attached form entitled “List of References Cited by Applicant.”

Copies of references A01-A04, B01-B16 and C01-C124 are submitted herewith. Copies of references A05-A23 are not submitted herewith because they are U.S. patents or U.S. Patent Application Publications, for which copies are not required pursuant to 37 C.F.R. § 1.98 (a)(2)(i) as amended (*see* Fed. Reg. vol. 69, no. 182, Sept. 21, 2004).

Identification of the listed references is not meant to be construed as an admission of Applicants or Attorneys for Applicants that such references are available as “prior art” against the subject application.

Applicants respectfully request that the Examiner review the foregoing references and that the references be made of record in the file history of the application.

Pursuant to 37 C.F.R. §1.97(b), since this information disclosure statement is being filed before the mailing date of a first Office Action on the merits, no fee is believed to be due in connection herewith. However, should the Patent Office determine otherwise, please charge the required fee to Jones Day deposit account no. 50-3013. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Date: November 16, 2006

Adriane M. Antler 32, 605  
Adriane M. Antler (Reg. No.)

JONES DAY  
222 East 41<sup>st</sup> Street  
New York, New York 10017-6702  
(212) 326-3939

Enclosure



BY HAND  
Sheet 1 of 8

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Natl. Stage of PCT/US03/32167)
	APPLICANT	
	LeClair et al.	
	FILING DATE	ART UNIT
	October 7, 2003	To be assigned

### U.S. PATENT DOCUMENTS

*Examiner Initial	Document Number	Date mm/dd/yy	Name Of Patentee Or Applicant Of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
A01	60/209,095	6/2/00	Srivastava	
A02	60/416,821	10/7/02	LeClair et al.	
A03	09/668,724	9/22/00	Srivastava	
A04	09/625,137	7/25/00	Srivastava	
A05	US 2002 0001841 A1	1/03/02	Kaltoft et al.	
A06	US 2002 0028207	3/7/02	Srivastava	
A07	5,112,298	5/12/92	Prince et al.	
A08	5,554,293	9/10/96	Uhoch	
A09	5,637,082	6/10/97	Pages et al.	
A10	5,830,464	11/3/98	Srivastava et al.	
A11	5,837,251	11/17/98	Srivastava	
A12	5,846,928	12/8/98	Kishida	
A13	5,935,576	8/10/99	Srivastava	
A14	5,961,979	10/5/99	Srivastava	
A15	5,968,526	10/19/99	Garman et al.	
A16	5,985,270	11/16/99	Srivastava	
A17	6,007,821	12/28/99	Srivastava et al.	
A18	6,017,540	1/25/00	Srivastava et al.	
A19	6,027,731	2/22/00	Pauza	
A20	6,033,561	3/7/00	Schoendorfer	
A21	6,156,311	12/05/00	Strickland et al.	
A22	6,333,311	12/25/01	Nuijens et al.	
A23	6,797,480	09/28/04	Srivastava	

### FOREIGN PATENT DOCUMENTS

	Foreign Patent Document Country Code, Number, Kind Code (If Known)	Date mm/dd/yy	Name Of Patentee Or Applicant Of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T
B01	WO 94/14471	07/07/94	Washington University		
B02	WO 94/14976	7/7/94	Duke University		
B03	WO 96/10411	4/11/96	Mount Sinai School of Medicine of The City University of New York		

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Natl. Stage of PCT/US03/32167)
	APPLICANT	
	LeClair et al.	
FILING DATE	ART UNIT	
October 7, 2003	To be assigned	

### FOREIGN PATENT DOCUMENTS

		Foreign Patent Document Country Code, Number, Kind Code (If Known)	Date mm/dd/yy	Name Of Patentee Or Applicant Of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T
	B04	WO 97/04794	2/13/97	The American National Red Cross – The General Hospital Corporation		
	B05	WO 97/10002	3/20/97	Fordham University		
	B06	WO 98/42752	10/01/98	Brigham and Women's Hospital		
	B07	WO 98/046739	10/22/98	Juridical Foundation – The Chemosero-Therapeutic Research Institute		
	B08	WO 98/46743	10/22/98	The Wellcome Trust Limited as the Trustee to the Wellcome Trust		
	B09	WO 99/50303	10/7/99	Duke University		
	B10	WO 00/03003	1/20/00	The University of Nottingham		
	B11	WO 00/34494	6/15/00	The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services		
	B12	WO 00/38760	7/6/00	Occulogix Coporation		
	B13	WO 00/46246	8/10/00	The General Hospital Corporation		
	B14	WO 00/54801	09/21/00	Entremed, Inc.		
	B15	WO 01/91787	12/6/01	Univ. of Conn. Health Center		
	B16	WO 02/07755	1/31/2002	The General Hospital Corporation		

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials		(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
	C01	AGOSTONI et al., 1994, "Activation of complement and kinin systems after thrombolytic therapy in patients with acute myocardial infarction. A comparison between streptokinase and recombinant tissue-type plasminogen activator." Circulation. 90(6):2666-70.	
	C02	ARNOLD et al., 1995, "Cross-priming of minor histocompatibility antigen-specific cytotoxic T cells upon immunization with the heat shock protein gp96." J Exp. Med. Sep 1;182(3):885-9.	
	C03	ARNOLD-SCHILD et al., 1999, "Cutting edge: receptor-mediated endocytosis of heat shock proteins by professional antigen-presenting cells." J. Immunol. 162: 3757-3760.	
	C04	ASEA et al., 2000, "HSP70 stimulates cytokine production through a CD14 dependant pathway, demonstrating its dual role as a chaperone and cytokine." Nature Med. 6: 435-42	
	C05	BASU et al., 2001, "CD91 is a common receptor for heat shock proteins gp96, hsp90, hsp70, and calreticulin." Immunity 14(3):303-313	
	C06	BEDNAR et al., 1997, "Activation of complement by tissue plasminogen activator, but not acute cerebral	

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>LIST OF REFERENCES CITED BY APPLICANT</b> (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Natl. Stage of PCT/US03/32167)
	APPLICANT LeClair et al.	
	FILING DATE October 7, 2003	ART UNIT To be assigned

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials		(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
		ischemia, in a rabbit model of thromboembolic stroke." J. Neurosurg. 86(1):139-42.	
	C07	BELLONE et al., 1999, "Cancer Immunotherapy: synthetic and natural peptides in balance." Immunology Today 20(10): 457-462	
	C08	BEVAN, 1995, "Antigen presentation to cytotoxic T lymphocytes in vivo." J.Exp. Med. 192: 639-41	
	C09	BINDER & SRIVASTAVA, 2004, "Essential role of CD91 in re-presentation of gp96-chaperoned peptides." Proc. Natl. Acad. Sci. U.S.A. 101:6128-6133	
	C10	BINDER et al., 1998, "Receptor-dependent and Receptor-independent re-presentation of heat-shocked protein-chaperoned peptides." Cell Stress & Chaperones 3 (Supp.1): 2.	
	C11	BINDER et al., 2000, "CD 91: a receptor for heat shock protein gp96." Nature Immunol. 1(2):151-155	
	C12	BINDER et al., 2001, "Adjuvanticity of alpha 2-macroglobulin, an independent ligand for the heat shock protein receptor CD91." J. Immunol. 166(8):4968-72	
	C13	BINDER et al., 2001, "Heat shock protein-chaperoned peptides but not free peptides introduced into the cytosol are presented efficiently by major histocompatibility complex I molecules." J. Biol. Chem. 276(20):17163-17171	
	C14	BINDER et al., 2002, "Naturally formed artificially reconstituted non-covalent alpha 2-macroglobulin-peptide complexes elicit CD91-dependent cellular immunity." Cancer Immunity 2:16-24	
	C15	BOSCH et al., 1999, "State of the art of therapeutic apheresis in Europe." Ther Apher. 3(3):197-8.	
	C16	CASTELLINO et al., 2000, "Receptor-mediated Uptake of Antigen/Heat Shock Protein Complexes Results in Major Histocompatibility Complex Class I Antigen Presentation via Two Distinct Processing Pathways." J. Exp. Med. 191: 1957-64.	
	C17	CHEN et al., 1999, "Human 60-kDa Heat-Shock Protein: A Danger Signal to the Innate Immune System." J. Immunology 162: 3212-3219	
	C18	CHU & PIZZO, 1993, "Receptor mediated antigen delivery into macrophages. Complexing antigen to $\alpha_2$ -macroglobulin enhances presentation into T cells." J. Immun. 150(1):48-58.	
	C19	CHU et al., 1994, "Adjuvant-Free in Vivo Targeting. Antigen Delivery by $\alpha_2$ -macroglobulin enhances antibody formation." J. Immun. 152(4):1538-45.	
	C20	CIUPITU et al., 1998, "Immunization with a lymphocytic choriomeningitis virus peptide mixed with heat shock protein 70 results in protective antiviral immunity and specific cytotoxic T lymphocytes." J Exp Med. 187(5):685-91.	
	C21	COLLEN et al., 1989, "Tissue-type plasminogen activator. A review of its pharmacology and therapeutic use as a thrombolytic agent." Drugs. 38(3):346-88.	
	C22	COUTINHO et al., 1998, "Alpha-2-macroglobulin receptor is differently expressed in peritoneal macrophages from C3H and C57/B16 mice and up-regulated during Trypanosoma cruzi infection", Tissue and Cell 30: 407-15	
	C23	D'ANDREA, 2005, "Add Alzheimer's disease to the list of autoimmune diseases." Med. Hypotheses 64(3):458-463	
	C24	DAY et al., 1997, "Direct delivery of exogenous MHC class I molecule-binding oligopeptides to the endoplasmic reticulum of viable cells." Proc Natl Acad Sci. USA 94: 8064-8069	
	C25	DENNIS et al., 1989, "Alpha 2-macroglobulin is a binding protein for basic fibroblast growth factor." J Biol Chem. 264 (13) :7210-6.	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>LIST OF REFERENCES CITED BY APPLICANT</b> (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Nat'l. Stage of PCT/US03/32167)
	APPLICANT LeClair et al.	
FILING DATE October 7, 2003	ART UNIT To be assigned	

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials		(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
	C26	DERMER, 1994, "Another Anniversary for the War on Cancer." Biotech. 12:320	
	C27	EPPLER et al. 1997. Genetic predisposition to multiple sclerosis as revealed by immunoprinting." Ann Neurol. 41(3):341-52.	
	C28	FADOK et al., 2000, "A receptor for phosphatidylserine-specific clearance of apoptotic cells." Nature 405(6782):85-90.	
	C29	FAY et al., 1979, "Leukopheresis Therapy of Leukemic Reticuloendotheliosis (Hairy Cell Leukemia)." Blood 54: 747-749	
	C30	FORRESTER et al., 1983, "Effect of modified alpha 2macroglobulin on leucocyte locomotion and chemotaxis." Immunol.. 50(2):251-9.	
	C31	FRESHNEY, 1983, "Culture of Animal Cells, A Manual of Basic Technique." Alan R. Liss Inc., New York, p.4	
	C32	GAIGER et al., 2000, "Immunity to WT1 in the animal model and in patients with acute myeloid leukemia." Blood 96(4):1480-1489	
	C33	GOTO et al., 2002, "The role of the low-density lipoprotein receptor-related protein (LRP1) in Alzheimer's Abeta generation." J. Mol. Neurosci. 19:37-41	
	C34	GURA T, 1997, "Systems for identifying new drugs are often faulty." Science Nov 7:278:1041-1042	
	C35	HAAS et al., 1988, "cDNA cloning of the immunoglobulin heavy chain binding protein", Proc Natl Acad Sci U S A. 85(7):2250-4.	
	C36	HANOVER et al., 1986, "Monoclonal antibodies against a glycoprotein localized in coated pits and endocytic vesicles inhibit alpha2-macroglobulin binding and uptake." J. of Biol. Chem. 261(35): 16732-16737.	
	C37	HERZ et al., 1990, "Low density lipoprotein receptor-related protein mediates endocytosis of monoclonal antibodies in cultured cells and rabbit liver." J. of Biol. Chem. 265(34): 21355-21362.	
	C38	HERZ et al., 1988, "Surface location and high affinity for calcium of a 500-kd liver membrane protein closely related to the LDL-receptor suggest a physiological role as lipoprotein receptor." EMBO J. 7(13):4119-27.	
	C39	HERZ et al., 1991, "39-kDa protein modulates binding of ligands to low density lipoprotein receptor-related protein/alpha-2-macroglobulin receptor." J. Biol. Chem. 266(31):21232-21238	
	C40	HERZ et al., 2001, "LRP: a multifunctional scavenger and signaling receptor." J. Clin. Invest. 108:779-784	
	C41	HEY et al., 1988, "Cloning of a novel member of the low-density lipoprotein receptor family." Gene 216: 103-111.	
	C42	HICKEY et al., 1986, "Sequence and organization of genes encoding the human 27 kDa heat shock protein." Nucleic Acids Res. 14(10):4127-45.	
	C43	HICKEY et al., 1989, "Sequence and regulation of a gene encoding a human 89-kilodalton heat shock protein." Mol Cell Biol. 9(6):2615-26.	
	C44	HILLIKER et al., 1992, "Assignment of the gene coding for the alpha 2-macroglobulin receptor to mouse chromosome 15 and to human chromosome 12q13-q14 by isotopic and nonisotopic in situ hybridization." Genomics. 13(2):472-4.	
	C45	HOLTTU et al., 1994, "Recombinant $\alpha_2$ M Receptor binding domain binds to the $\alpha_2$ M receptor with high affinity." Ann N Y Acad Sci. 737:480-2.	
	C46	HORN et al., 1995, "Analysis of the binding of Pro-urokinase and urokinase-plasminogen activator inhibitor-1 complex to the low density lipoprotein receptor-related protein using a Fab fragment selected from a phage-displayed Fab library." J. of Biol. Chem. 270 (20): 11770-11775.	

EXAMINER	DATE CONSIDERED
----------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>LIST OF REFERENCES CITED BY APPLICANT</b> (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Nat'l. Stage of PCT/US03/32167)
	APPLICANT	
	LeClair et al.	
	FILING DATE	ART UNIT
	October 7, 2003	To be assigned

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials		(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
	C47	HOUGHTEN et al., 1991, "Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery." <i>Science</i> 354:84-86	
	C48	HUANG et al., 1984, "Specific covalent binding of platelet-derived growth factor to human plasma alpha 2-macroglobulin." <i>Proc Natl Acad Sci U S A.</i> 81(2):342-6.	
	C49	HUANG et al., 1996, "The immunodominant major histocompatibility complex class I-restricted antigen of a murine colon tumor derives from an endogenous retroviral gene product." <i>Proc. Natl. Acad. Sci. USA.</i> 93: 9730-9735.	
	C50	HUANG et al., 1999, "NMR solution structure of complement-like repeat CR8 from the low density lipoprotein receptor -related protein." <i>J. of Biol. Chem.</i> 274: 14130-14136	
	C51	HUGHES et al., 1970, "A study in clinical cancer immunotherapy." <i>Cancer</i> (Aug.) pp. 269-278	
	C52	HUNT et al., 1990, "Characterization and sequence of a mouse hsp70 gene and its expression in mouse cell lines." <i>Gene.</i> 87(2):199-204.	
	C53	HUNTER, N. et al., 1991, "Suppression of experimental allergic encephalomyelitis by alpha(2)-macroglobulin." <i>Immunol.</i> 73:58-63	
	C54	ISAACS et al., 1988, "Use of anti-idiotypic antibodies to establish that monoclonal antibody 7H11D6 binds to the alpha2-macroglobulin receptor recognition site." <i>J. Biol. Chem.</i> 263(14): 6709-6714.	
	C55	JAMES, 1980, "Alpha (2) macroglobulin and its possible importance in immune systems." <i>Trends in Biol. Sci.</i> 43-47	
	C56	JENSEN et al., 1989, "Comparison of $\alpha$ -macroglobulin receptors from human, baboon, rat and mouse liver." <i>Biochem. Arch.</i> 5:171-6	
	C57	JINDAL et al., 1989, "Primary structure of a human mitochondrial protein homologous to the bacterial and plant chaperonins and to the 65-kilodalton mycobacterial antigen." <i>Mol Cell Biol.</i> 9(5):2279-83.	
	C58	KATSUTANI et al., 1992, "Immunogenic properties of structurally modified human tissue plasminogen activators in chimpanzees and mice." <i>Fundam Appl Toxicol.</i> 19(4):555-62.	
	C59	KIM et al., 1998, "A new low density lipoprotein receptor related protein, LRP5, is expressed in hepatocytes and adrenal cortex, and recognized apolipoprotein E." <i>J. Biochem.</i> 124: 1072-1076.	
	C60	KIMBER et al., 2002, "Lactoferrin: influences on langerhans cells, epidermal cytokines, and cutaneous inflammation." <i>Biochem Cell Biol.</i> 2002;80(1):103-7.	
	C61	KOL et al., 2000, "Cutting edge: heat shock protein (HSP)60 activates the innate immune response: CD14 is an essential receptor for HSP60 activation of monomuclear cells." <i>J Immunol.</i> 164(1):13-17	
	C62	KORNFELD et al., 1980, "Plasmapheresis in Myasthenia Gravis." <i>Plasma Therapy</i> , 2(3): 127-133	
	C63	KRIEGER & HERZ, 1994, "Structures and functions of multiligand lipoprotein receptors: macrophage scavenger receptors and LDL receptor-related protein (LRP)." <i>Annu Rev Biochem.</i> 63:601-37.	
	C64	KRISTENSEN et al., 1990, "Evidence that the newly cloned low-density-lipoprotein receptor related protein (LRP) is the alpha 2-macroglobulin receptor." <i>FEBS Lett.</i> 276(1-2):151-5.	
	C65	KUHLMANN et al., 1997, "Drug Research: from the idea to the product," <i>Intl. J. of Pharm. &amp; Therap.</i> 35:541-552	
	C66	MAKI et al., 1990, "Human homologue of murine tumor rejection antigen gp96: 5'-regulatory and coding regions and relationship to stress-induced proteins." <i>Proc Natl Acad Sci U S A.</i> 87(15):5658-62.	
	C67	MAKI et al., 1993, "Mapping of the genes for human endoplasmic reticular heat shock protein gp96/grp9."	

EXAMINER	DATE CONSIDERED
----------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>LIST OF REFERENCES CITED BY APPLICANT</b> (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Nat'l. Stage of PCT/US03/32167)
	APPLICANT LeClair et al.	
	FILING DATE October 7, 2003	ART UNIT To be assigned

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials		(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
		Somat Cell Mol Genet. 19(1):73-81.	
	C68	MCKEE & COLLINS, 1974, "Intravascular Leukocyte thrombi and aggregates as a cause of morbidity and mortality in leukemia." Medicine 53: 463-478	
	C69	MILLWARD & HOELTGE, 1982, "The Historical Development of Automated Hemapheresis." J. of Clin. Apheresis 1: 25-32	
	C70	MISRA et al., 1993, "Receptor-recognized alpha 2-macroglobulin-methylamine elevates intracellular calcium, inositol phosphates and cyclic AMP in murine peritoneal macrophages." Biochem J. 290 ( Pt 3):885-91.	
	C71	MITSUDA et al., 1993, "A receptor mediated delivery of an HIV 1 derived peptide vaccine." Biochem Biophys Res Commun 194(3): 1155-60	
	C72	MITSUDA et al., 1993, "A receptor-mediated antigen delivery and incorporation system." Biochem. and Biophys. Res. Comm. 191: 1326-31	
	C73	MOESTRUP et al., 1990, "Immunocytochemical identification of the human alpha 2-macroglobulin receptor in monocytes and fibroblasts: monoclonal antibodies define the receptor as a monocyte differentiation antigen." Exper. Cell Res. 190: 195-203.	
	C74	MOESTRUP et al., 1991, "Analysis of Ligand Recognition by the purified alpha-2M- macroglobulin receptor (low density lipoprotein receptor-related protein)." J. Biol. Chem. 266(21):14011-14017	
	C75	MOESTRUP et al., 1992, "Distribution of the alpha 2-macroglobulin receptor/low density lipoprotein receptor-related protein in human tissues." Cell Tissue Res. 269(3):375-82.	
	C76	MOESTRUP et al., 1993, " $\alpha_2$ -macroglobulin-proteinase complexes, plasminogen activator inhibitor type-1-plasminogen activator complexes, and receptor-associated protein bind to a region of the $\alpha_2$ -macroglobulin receptor containing a cluster of eight complement type repeats." J. of Biolog. Chem. 268: 13691-13696.	
	C77	NICCHITTA et al., 1998, "Biochemical, cell biological and immunological issues surrounding the endoplasmic reticulum chaperone GRP94/gp96." Curr Opin Immunol. 10(1):103-9.	
	C78	NIELSEN et al., 1996, "Identification of residues in alpha-macroglobulins important for binding to the alpha2-macroglobulin receptor/Low density lipoprotein receptor-related protein." J Biol Chem. 271(22):12909-12.	
	C79	NYKJAER et al., 1992, "Purified alpha 2-macroglobulin receptor/LDL receptor-related protein binds urokinase.plasminogen activator inhibitor type-1 complex. Evidence that the alpha 2-macroglobulin receptor mediates cellular degradation of urokinase receptor-bound complexes." J Biol Chem. 267(21):14543-6.	
	C80	O'CONNOR-MCCOURT et al., 1987, "Latent transforming growth factor-beta in serum. A specific complex with alpha 2-macroglobulin." J Biol Chem. 262(29):14090-9.	
	C81	OPEKUN et al., 1999, "Novel therapies for Helicobacter pylori infection." Aliment Pharmacol Ther. 13(1):35-42.	
	C82	ORTH et al., 1992, "Complexes of tissue-type plasminogen activator and its serpin inhibitor plasminogen-activator inhibitor type 1 are internalized by means of the low density lipoprotein receptor-related protein/alpha 2-macroglobulin receptor." Proc Natl Acad Sci U S A. 89(16):7422-6.	
	C83	OSADA et al., 1987, "Murine T cell proliferation can be specifically augmented by macrophages fed with specific antigen: $\alpha$ -2-macroglobulin conjugate." Biochem. and Biophys. Res. Comm. 146: 26-31	
	C84	OSADA et al., 1988, "Antibodies against viral proteins can be produced effectively in response to the increased uptake of alpha 2 macroglobulin: viral protein conjugate by macrophages." Biochem and Biophys. Res. Comm. 150: 883-889.	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>LIST OF REFERENCES CITED BY APPLICANT</b> (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Nat'l. Stage of PCT/US03/32167)
	APPLICANT LeClair et al.	
	FILING DATE October 7, 2003	ART UNIT To be assigned

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
C85	PINEDA et al., 1994, "Applications of therapeutic apheresis." Mayo Clin Proc. 1994 Sep;69(9):893-4.	
C86	PROUD, ET AL., 1979, "BLOOD TRANSFUSION AND RENAL TRANSPLANTATION." BR. J. SUR. 66:678-82	
C87	REED et al., 1990, "Low incidence of antibodies to recombinant human tissue-type plasminogen activator in treated patients." Thromb Haemost. 64(2):276-80.	
C88	REPORT OF THE AMA Panel on Therapeutic Plasmapheresis, Current Status of Therapeutic Plasmapheresis and Related Techniques.	
C89	SARGENT et al., 1989, "Human major histocompatibility complex contains genes for the major heat shock protein HSP70." Proc Natl Acad Sci U S A. 86(6):1968-72.	
C90	SAVILL et al., 1992, "Thrombospondin cooperates with CD36 and the vitronectin receptor in macrophage recognition of neutrophils undergoing apoptosis." J Clin Invest. 90(4):1513-22.	
C91	SINGH et al., 1997, "Neuroautoimmunity: pathogenic implications for Alzheimer's disease." Gerontology 43:79-94	
C92	SINGH-JASJUA et al., 2000, "Cross Presentation of Glycoprotein 96-associated antigens on major histocompatibility complex class I molecules requires receptor-mediated endocytosis." J. Exp. Med. 191:1965-74	
C93	SMORODIN et al., 1991, "The complex of alpha-2 macroglobulin with CD2 in the plasma of Gastric Carcinoma patients." Scand. J. Immunol. 33(6):699-706.	
C94	SOEIRO et al., 2000, "Trypanosoma cruzi: Acute Infection Affects Expression of α-2-macroglobulin and A2MR/LRP Receptor Differently in C3H and C57BL/6 Mice." Exper. Parasitology 96: 97-107	
C95	SOTGIU et al. 1998, Genetic susceptibility to multiple sclerosis in Sardinians: an immunological study." Acta Neurol Scand. 98(5):314-7.	
C96	SPERO et al., 1980, "Plasma Exchange in Preparation of Mild Factor IX Deficient Hemophiliacs for Surgical Procedures." 19-22	
C97	SRIVASTAVA et al., 1987, "5'-structural analysis of genes encoding polymorphic antigens of chemically induced tumors." Proc. Natl. Acad. Sci USA 85:3807-3811	
C98	SRIVASTAVA et al., 1991, "Stress-induced proteins in immune response to cancer", Curr Top Microbiol Immunol. 167:109-23.	
C99	SRIVASTAVA et al., 1994, "Heat shock proteins transfer peptides during antigen processing and CTL priming." Immunogenetics. 39(2):93-8. Review.	
C100	SRIVASTAVA et al., 1998, "Heat shock proteins come of age: primitive functions acquire new roles in an adaptive world." Immunity. 8(6):657-65.	
C101	SRIVASTAVA, 1993, "Peptide-binding heat shock proteins in the endoplasmic reticulum: role in immune response to cancer and in antigen presentation." Adv Cancer Res. 1993;62:153-77.	
C102	SRIVASTAVA, 1994, "Heat shock proteins in immune response to cancer: the Fourth Paradigm." Experientia. (11-12):1054-60.	
C103	SRIVASTAVA, 2002, "Roles of heat-shock proteins in innate and adaptive immunity." Nature Rev Immunol Mar 2(3): 185-94	
C104	SRIVASTAVA, 2002, "Interaction of heat shock proteins with peptides and antigen presenting cells: chaperoning of the innate and adaptive immune responses," Annu. Rev. Immunol. 20:395-425	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>LIST OF REFERENCES CITED BY APPLICANT</b> (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.
	8449-304-999	10/530,393 (Natl. Stage of PCT/US03/32167)
	APPLICANT LeClair et al.	
	FILING DATE October 7, 2003	ART UNIT To be assigned

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials		(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
	C105	STEBBING et al., 2003, "The heat-shock protein receptor CD91 is up-regulated in monocytes of HIV-1-infected "true" long-term nonprogressors," Blood 101(10):4000-4	
	C106	STEBBING et al., 2003, "Disease-associated dendritic cells respond to disease-specific antigens through the common heat shock protein receptor," Blood 102(5):1806-14	
	C107	STRICKLAND et al., 1990, "Sequence identity between the alpha 2-macroglobulin receptor and low density lipoprotein receptor-related protein suggests that this molecule is a multifunctional receptor." J Biol Chem. 15;265(29):17401-4.	
	C108	SUTO & SRIVASTAVA, 1995, "A mechanism for the specific immunogenicity of heat shock protein-chaperoned peptides," Science 269(5230):1585-8	
	C109	TAIT, BD. 1990, "Genetic susceptibility to type I diabetes: a review." J Autoimmun. 3 Suppl 1:3-11	
	C110	THE MERCK MANUAL OF DIAGNOSIS AND THERAPY, 1999, Beers and Berkow eds., Merck Research Laboratories, Whitehouse Station N.J., pp. 1871 and 1872	
	C111	TING et al., 1988, "Human gene encoding the 78,000-dalton glucose-regulated protein and its pseudogene: structure, conservation, and regulation." DNA. 7(4):275-86.	
	C112	URBANIAK & ROBINSON, 1990, "ABC of transfusion. Therapeutic apheresis", BMJ. 300(6725):662-5. Review	
	C113	VAN LEUVEN et al., 1993, "Molecular cloning and sequencing of the murine alpha-2-macroglobulin receptor cDNA." Biochim Biophys Acta. 1173(1):71-4.	
	C114	VOET et al., 1990, "Biochemistry" (New York, John Wiley & Sons) 844-845	
	C115	WARSHAWSKY et al., 1993, "Identification of domains in the 39-kDa protein that inhibit the binding of ligands to the low density lipoprotein receptor-related protein." J. Biol. Chem. 268(29):22046-22054	
	C116	WASSENBERG et al., 1999, "Receptor mediated and fluid phase pathways for internalization of the ER Hsp90 chaperone GRP94 in murine macrophages." J. Cell Science 112: 2167-2175.	
	C117	WEINER et al., 1980, "Plasmapheresis in multiple sclerosis: preliminary study." Neurology 30: 1029-33.	
	C118	WEINER et al., 2002, "Inflammation and therapeutic vaccination in CNS diseases" Nature 420:879-884	
	C119	WILLNOW et al., 1994, "Molecular dissection of ligand binding sites on the low density lipoprotein receptor-related protein." J. of Biol. Chem. 269: 15827-15832	
	C120	WILLNOW et al., 1996, "The low-density-lipoprotein receptor-related protein (LRP) is processed by furin in vivo and in vitro." The Biochem. J. England 313:71-76	
	C121	YAMAUCHI et al., 2000, "Oral administration of bovine lactoferrin for treatment of tinea pedis. A placebo-controlled, double-blind study." Mycoses.43(5):197-202.	
	C122	YAMAZAKI et al., 1989, "Nucleotide sequence of a full-length cDNA for 90 kDa heat-shock protein from human peripheral blood lymphocytes." Nucleic Acids Res. 17(17):7108.	
	C123	ZIMECKI et al., 1998, "Immunoregulatory effects of a nutritional preparation containing bovine lactoferrin taken orally by healthy individuals." Arch Immunol Ther Exp (Warsz). 46(4):231-40.	
	C124	ZIMECKI et al., 1999, "Lactoferrin increases the output of neutrophil precursors and attenuates the spontaneous production of TNF-alpha and IL-6 by peripheral blood cells." Arch Immunol Ther Exp (Warsz). 47(2):113-8.	

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	